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EXAMINER	
LEE, JAE YOUNG	

ART UNIT	PAPER NUMBER
2466	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/561,786	JULIEN, ERIC	
	Examiner	Art Unit	
	JAE Y. LEE	2466	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. Claims 3 and 7 have been canceled.

2. Claims 1, 5, 10, 13 have been amended.

Response to Arguments

3. Applicant's arguments filed on 14 June 2010 have been fully considered but they are not persuasive.

4. On pages 12, 13, 16 of the applicant's arguments, the applicant argues that because the network indicator, indicating which network is to be used, received with the traffic, there is clearly no need for a network selection table comprising entries that associates point codes with network types ... Thus, Niermann clearly fails to teach or suggest "accessing a network selection table comprised within a message transport part layer 3 (MTP3) application programming interface (API) level of a protocol stack to determine how to process the message ... wherein the network selection table comprises entries that associate point codes with network types."

5. The examiner respectfully disagrees with the applicant's arguments because Niermann teaches "the SG 114A will *route* the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic (paragraph 0040 lines 6-9)." It is obvious that the SG maintains routing table (or DB) in order to route the packet including "NI" and "DPC" in its header upon receiving it. The

routing decision can not be made without comparing the header information, i.e., NI, DPC, etc., and the corresponding information within the routing table.

6. On pages 13-14 of the applicant's arguments, the applicant argues that the claim invention recites a service that interfaces with a SS7 network and an IP network, not a signaling gateway ... Thus, it is clear that Niermann does not teach or suggest "receiving a message from an originating network element at an interface of a service application"

7. The examiner respectfully disagrees with the applicant's arguments because the claim limitation only recites "the service application interfaces with both a Signaling System 7 (SS7) network and an Internet Protocol (IP) network." Base upon broadest reasonable interpretation of the claim language, the service application may be not only layer 7 application but also layer 3 or 4 types of service including network service, routing/forwarding service because the claim language" is still broad so that it can be interpreted in various way. The "service application" merely interacts with two different networks without further limitation in detail. Therefore, the service application represented by the signaling gateway interfaces with SS7 network and IP network directly or indirectly. Niermann teaches SG 114A has an SS7 interface 116 which allows it to receive information from nodes in an SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109 (paragraph 0034 lines 5-9) and the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic (paragraph 0040 lines 6-9). Therefore, the claim limitation above is taught by Niermann.

8. On pages 18, 19, 21, the applicant argues that the Niermann does not teach "the device is not a signaling gateway ... the claimed invention recites a service application that interfaces with a SS7 network and an IP network, not a signaling gateway."

9. The examiner also respectfully disagrees with the applicant's arguments because the claim limitation only recites "the service application interfaces with both a Signaling System 7 (SS7) network and an Internet Protocol (IP) network." Base upon broadest reasonable interpretation of the claim language, the service application may be not only layer 7 application but also layer 3 or 4 types of service including network service, routing/forwarding service. Prasad teaches STP (Fig. 3: 20A, 20C), routing table (Fig. 6 550), MTP 3 (Fig. 6 505), M3UA (Fig. 6 580), the processor first reviews the SS7 routing table (RT) to determine the routing context associated with the routing code specified by the received SS7 signal as the destination address and the "upward" routing context indicates that the specified routing code can be identified within a separate IP routing table and thereby indicating the signal can be communicated over an IP network (paragraph 0030 lines 11-23), in response to a determination that the specified routing context is upward, the processor then reviews the IP routing table stored within the serving STP (paragraph 0031 lines 1-3). Therefore, it is obvious that the STP having routing table can perform same or similar functionality, which interfaces with SS7 and IP network in order to perform layer 3 or 4 service instead of Signaling Gateway.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

11. all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. **Claims 1, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965).

For claim 1, Niermann discloses a method comprising:

- receiving a message from an originating network element at an interface of a service application, wherein the service application interfaces with both a Signaling System 7 (SS7) network and an Internet Protocol (IP) network (Fig. 4; Fig. 6; paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service; paragraph 0034 lines 5-9: SG 114A has an SS7 interface 116 which allows it to

receive information from nodes in an SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic), and wherein the message includes a point code associated with the network element (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic);

- accessing a network selection table comprised within a message transport part layer 3 (MTP3) application programming interface (API) level of a protocol stack to determine how to process the message, wherein the protocol stack comprises both a MTP3 layer and a MTP3 user adaptation layer (M3UA) layer, and wherein the network selection table comprises entries that associate point codes with network types (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network);

- processing the message with the MTP3 layer if it is determined that the point code associated with the originating network element corresponds to the SS7 network (Fig. 2, Fig. 5; paragraph 0028 lines 14-15: MTP level three provides message routing between signaling points in the SS7 network; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network); and
- processing the message with the M3UA layer if it is determined that the point code associated with the originating network element corresponds to the IP network (Fig. 5; paragraph 0039 lines 5-11: M3UA is a protocol that supports the transport of any SS7 MTP3-User signaling over an IP network using the services of the SCTP layer; paragraph 0039 lines 15-17: M3UA to permit IP-enabled end nodes within the IP network and to support communications over the IP link; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network

identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann discloses all the subject matter of claimed invention with the exception for a point code associated with the originating network element. Poole from the same or similar fields of endeavor discloses a point code associated with the originating network element (col 11 lines 50-54: IAM message includes SS7 DPC and OPC for addressing purpose). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate a point code associated with the originating network element a point code associated with the originating network element of Poole to the method of Niermann. The motivation would have been to assist with routing of information.

For claims 16, Niermann discloses

- wherein thee originating network element is a service switching point (SSP) or a message switching center (MSC) (paragraph 0025 lines 5-8: SSP can provide an interface between a telecommunications switch such as a Mobile Switching Center (MSC) and other nodes of the SS7 network; paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service; paragraph 0034 lines 5-9: SG 114A has an SS7 interface 116 which allows it to receive information from nodes in an

SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109)

14. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) as applied to claim 1 above, and further in view of Miller al. (US 6,944,184).

For claim 2, Niermann discloses

- the service application (paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for a home location register (HLR) or a service control point (SCP). Miller from the same or similar fields of endeavor discloses a home location register (HLR) or a service control point (SCP) (col 2 lines 16-22: wireless network communication database applications include home network location registers (HLRs) and SCP including database system). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate a home location register (HLR) or a service control point (SCP) of Miller to the method of Niermann and Poole. The motivation would have been to provide HLR and SCP in order to provide database service in wireless network as well as wired network.

15. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) as applied to claim 1 above, and further in view of Garcia-Martin (US 7,054,326).

For claim 4, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for network selection table populated automatically. Garcia-Martin from the same or similar fields of endeavor discloses network selection table populated automatically (col 5 lines 31-35: the look-up table used by the MTP level 3 is modified to replace signaling links with IP addresses and port numbers, where respective signaling points are connected to the IP network; it is implicitly performed automatically because the entity of the look-table is modified without human intervention). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate network selection table populated automatically of Garcia-Martin to

the method of Niermann and Poole. The motivation would have been to enhance efficiency of processing the network table in an automatic manner.

16. **Claims 5, 6, 12** are rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) and Miller al. (US 6,944,184).

For claim 5, Niermann discloses a system comprising:

- A communication interface configured to receive a message from an originating network element at an interface of a service application, wherein the service application interfaces with both a Signaling System 7 (SS7) network and an Internet Protocol (IP) network (Fig. 4; Fig. 6; paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service; paragraph 0034 lines 5-9: SG 114A has an SS7 interface 116 which allows it to receive information from nodes in an SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic), and wherein the message includes a point code associated with the network element (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic);

- accessing a network selection table comprised within a message transport part layer 3 (MTP3) application programming interface (API) level of a protocol stack to determine how to process the message, wherein the protocol stack comprises both a MTP3 layer and a MTP3 user adaptation layer (M3UA) layer, and wherein the network selection table comprises entries that associate point codes with network types (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network);
- processing the message with the MTP3 layer if it is determined that the point code associated with the originating network element corresponds to the SS7 network (Fig. 2, Fig. 5; paragraph 0028 lines 14-15: MTP level three provides message routing between signaling points in the SS7 network; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection

table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network); and

- processing the message with the M3UA layer if it is determined that the point code associated with the originating network element corresponds to the IP network (Fig. 5; paragraph 0039 lines 5-11: M3UA is a protocol that supports the transport of any SS7 MTP3-User signaling over an IP network using the services of the SCTP layer; paragraph 0039 lines 15-17: M3UA to permit IP-enabled end nodes within the IP network and to support communications over the IP link; paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann discloses all the subject matter of claimed invention with the exception for a point code associated with the originating network element. Poole from the same or similar fields of endeavor discloses a point code associated with the originating network element (col 11 lines 50-54: IAM message includes SS7 DPC and OPC for addressing purpose). Therefore, it would have been obvious to the person of ordinary

skill in the art at the time of invention was made to incorporate a point code associated with the originating network element a point code associated with the originating network element of Poole to the method of Niermann. The motivation would have been to assist with routing of information.

Niermann and Poole disclose all the subject matter of claimed invention with the exception for a processor and a computer-readable storage medium including computer-readable instruction stored therein that, upon execution by the processor, cause the device. Miller from the same or similar fields of endeavor discloses a processor and a computer-readable storage medium including computer-readable instruction stored therein that, upon execution by the processor, cause the device (col 4 lines 21-25: the functions for providing database access control are described herein as modules or processes. It is understood that these modules or process may be implemented as computer-executable instructions embodied in a computer-readable medium). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate a processor and a computer-readable storage medium including computer-readable instruction stored therein that, upon execution by the processor, cause the device of Miller to the method of Niermann and Poole. The motivation would have been to run the application program on the hardware system.

For claim 6, Niermann discloses

- the device (paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service;

paragraph 0034 lines 5-9: SG 114A has an SS7 interface 116 which allows it to receive information from nodes in an SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for a home location register (HLR) or a service control point (SCP). Miller from the same or similar fields of endeavor discloses a home location register (HLR) or a service control point (SCP) (col 2 lines 16-22: wireless network communication database applications include home network location registers (HLRs) and SCP including database system). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate a home location register (HLR) or a service control point (SCP) of Miller to the method of Niermann and Poole. The motivation would have been to provide HLR and SCP in order to provide database service in wireless network as well as wired network.

For claims 12, Niermann discloses

- wherein thee originating network element is a service switching point (SSP) or a message switching center (MSC) (paragraph 0025 lines 5-8: SSP can provide an interface between a telecommunications switch such as a Mobile Switching Center (MSC) and other nodes of the SS7 network; paragraph 0031 lines 1-5: SS7 protocol stack exchanging data between applications across the SS7 network and SCCP connectionless service; paragraph 0034 lines 5-9: SG 114A has an SS7 interface 116 which allows it to receive information from nodes in an

SS7 network and it includes an IP interface 118 which allows it to communicate over IP link 109)

17. **Claims 8** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) and Miller al. (US 6,944,184) as applied to claim 5 above, and further in view of Garcia-Martin (US 7,054,326).

For claim 8, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann, Poole, and Miller disclose all the subject matter of claimed invention with the exception for network selection table populated automatically. Garcia-Martin from the same or similar fields of endeavor discloses network selection table populated automatically (col 5 lines 31-35: the look-up table used by the MTP level 3 is modified to replace signaling links with IP addresses and port numbers, where respective signaling points are connected to the IP network; it is implicitly performed automatically because

the entity of the look-table is modified without human intervention). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate network selection table populated automatically of Garcia-Martin to the method of Niermann, Poole, and Miller. The motivation would have been to enhance efficiency of processing the network table in an automatic manner.

18. **Claims 9** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) and Miller al. (US 6,944,184) as applied to claim 5 above, and further in view of Lundstrom (US 2007/0220166).

For claim 9, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann, Poole, and Miller disclose all the subject matter of claimed invention with the exception for the network selection table populated manually. Lundstrom from the same or similar fields of endeavor the network selection table populated manually

(paragraph 0016: a table is taught to be manually updated (populated)). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the network selection table populated manually of Lundstrom to the system of Niermann, Poole, and Miller. The motivation would have been to provide manual population of a table will enable a system to handle unforeseen events that are not accounted for in automatic population.

19. **Claims 10** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) and Miller al. (US 6,944,184) as applied to claim 5 above, and further in view of Prasad et al. (US 2003/0016684).

For claim 10, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann, Poole, and Miller disclose all the subject matter of claimed invention with the exception for network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer. Prasad from the same or similar fields of endeavor discloses network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer (Fig. 6 550 routing table, 505 MTP 3, 580 M3UA; paragraph 0030 lines 11-23: the processor first reviews the SS7 routing table (RT) to determine the routing context associated with the routing code specified by the received SS7 signal as the destination address and the "upward" routing context indicates that the specified routing code can be identified within a separate IP routing table and thereby indicating the signal can be communicated over an IP network; paragraph 0031 lines 1-3: in response to a determination that the specified routing context is upward, the processor then reviews the IP routing table stored within the serving STP) Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer of Prasad to the system of Niermann, Poole, and Miller. The motivation would have been to transiently connect and interface with IP network without requiring undesirable or complex changes (Prasad paragraph 0008 lines 10-13).

20. **Claims 11** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) and Miller al. (US

6,944,184) as applied to claim 5 above, and further in view of Prasad et al. (US 2003/0016684).

For claim 11, Niermann discloses

- the device (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann, Poole, and Miller disclose all the subject matter of claimed invention with the exception for device is not a signaling gateway. Prasad from the same or similar fields of endeavor discloses device is not a signaling gateway (Fig. 3: 20A, 20C: STP, Fig. 6 550 routing table, 505 MTP 3, 580 M3UA; paragraph 0030 lines 11-23: the processor first reviews the SS7 routing table (RT) to determine the routing context associated with the routing code specified by the received SS7 signal as the destination address and the "upward" routing context indicates that the specified routing code can be identified within a separate IP routing table and thereby indicating the signal can be communicated over an IP network; paragraph 0031 lines 1-3: in response to a determination that the specified routing context is upward, the processor then reviews

the IP routing table stored within the serving STP) Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate device is not a signaling gateway of Prasad to the system of Niermann, Poole, and Miller. The motivation would have been to enhance flexibility of performing the functionality at STP in addition to the signaling gateway.

21. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) as applied to claim 1 above, and further in view of Prasad et al. (US 2003/0016684).

For claim 13, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer. Prasad from the same

or similar fields of endeavor discloses network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer (Fig. 6 550 routing table, 505 MTP 3, 580 M3UA; paragraph 0030 lines 11-23: the processor first reviews the SS7 routing table (RT) to determine the routing context associated with the routing code specified by the received SS7 signal as the destination address and the "upward" routing context indicates that the specified routing code can be identified within a separate IP routing table and thereby indicating the signal can be communicated over an IP network; paragraph 0031 lines 1-3: in response to a determination that the specified routing context is upward, the processor then reviews the IP routing table stored within the serving STP) Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate network selection table comprised within the MTP3 API level of the protocol stack is separate from a routing table in the MTP3 layer of Prasad to the method of Niermann and Poole. The motivation would have been to transiently connect and interface with IP network without requiring undesirable or complex changes (Prasad paragraph 0008 lines 10-13).

22. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) as applied to claim 1 above, and further in view of Lundstrom (US 2007/0220166).

For claim 14, Niermann discloses

- the network selection table (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for the network selection table populated manually. Lundstrom from the same or similar fields of endeavor the network selection table populated manually (paragraph 0016: a table is taught to be manually updated (populated)). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the network selection table populated manually of Lundstrom to the system of Niermann and Poole. The motivation would have been to provide manual population of a table will enable a system to handle unforeseen events that are not accounted for in automatic population.

23. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable by Niermann (US 2002/0131427) in view of Poole et al. (US 6,590,965) as applied to claim 1 above, and further in view of Prasad et al. (US 2003/0016684).

For claim 15, Niermann discloses

- the device (paragraph 0040 lines 6-9: the SG 114A will route the traffic it receives from its SS7 interface 116 using the Network Indicator (NI) and Destination Point Code (DPC) of the traffic; paragraph 0041 lines 5-8: the SG 114A applies global title translation to determine the destination point code, then it uses the network identifier and the DPC to determine how to route the SS7 signaling traffic; the network selection table implicitly exist because the signaling gateway 114A determines the destination and the network based upon NI and DPC received from SS7 network)

Niermann and Poole disclose all the subject matter of claimed invention with the exception for device is not a signaling gateway. Prasad from the same or similar fields of endeavor discloses device is not a signaling gateway (Fig. 3: 20A, 20C: STP, Fig. 6 550 routing table, 505 MTP 3, 580 M3UA; paragraph 0030 lines 11-23: the processor first reviews the SS7 routing table (RT) to determine the routing context associated with the routing code specified by the received SS7 signal as the destination address and the "upward" routing context indicates that the specified routing code can be identified within a separate IP routing table and thereby indicating the signal can be communicated over an IP network; paragraph 0031 lines 1-3: in response to a determination that the specified routing context is upward, the processor then reviews the IP routing table stored within the serving STP) Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate device is not a signaling gateway of Prasad to the method of Niermann and

Poole. The motivation would have been to enhance flexibility of performing the functionality at STP in addition to the signaling gateway.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jae Y. Lee whose telephone number is (571) 270-3936. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on (571) 272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jae Y Lee/
Examiner, Art Unit 2466

/Kevin C. Harper/
Primary Examiner, Art Unit 2462